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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/033,622
Filing Date: December 27, 2001
Appellant(s): PARKER, ABBIE

David R. Risley (Reg. No. 39,345)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10/16/2005 appealing from the Office action mailed 03/21/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,327,051	Moro et al.	12-2001
6,644,800 (introduced after final by the Examiner as extrinsic evidence)	Anderson	11-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-3,5-9,11-13 and 15-27 are rejected under 35 U.S.C §103(a). The rejection is set forth in the final Office Action mailed 03/21/2005. Examiner has parsed each limitation of the independent claims in the application and mapped it to the respective references of the prior art reference US Pat. No. 6,327,051 to Moro et al. (Moro) in the table below. Note, all the independent claims are equivalent, only to be embodied in a different statutory category under 35 U.S.C 101. Thus, Examiner has all the independent claims represented by the method of claim 1.

<i>Claim language</i>	<i>Prior Art to Moro</i>	<i>Examiner Comments</i>
<i>Claims 1,9,13,18 and 23:</i> A method for providing print outcome notification	Figs. 41 and Fig. 42, element S284 show a notification that the paper size physically in the printer is not correct and warns the user to make sure the user intends to continue printing or not; Fig. 54, element S404 and Fig. 49, element S353 and Fig. 48 show a notification that the intended driver setting of photo-color or color printing cannot be executed because there is no photo-color or color cartridge installed. Column 24, lines 7-20 state monochrome, color and photo-color require different printing heads	Examiner interprets print outcome notification as any display to the user that relates to the printing outcome
determining which print driver settings are selected	Fig. 42, element S282 shows determining what the driver settings are for the printer paper size; Fig. 49, element S352 shows determining what the driver settings are for the cartridge head, e.g., color, monochrome, etc. Fig. 54, element S404	
determining whether one or more of the print driver	Fig. 42, element S283 performs the comparison to determine if the driver	Note that the three criteria of quality,

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settings is likely to adversely affect the quality of images printed on the print media or the speed at which printing is performed, or to result in consumption of large amounts of printing device consumables;	setting and actual printing conditions are the same; the similar situation is shown in Fig. 49, element S353; Fig. 35 shows the possible different color schemes which intrinsically represent the quality of the print output. "Photo Color" is better quality "Color" and "Color" is better quality than "Monochrome".	speed or ink consumption are stated in the alternative, thus Examiner only need to find one. Appellant's claims 28-33 submitted after final narrowed the claims to just one of the three criteria, which would force a new search by the Examiner for each individual criteria, hence was not entered
providing notification to a user that a selected print driver setting may result in an adverse printing result.	Figs. 41 and 42, element S284 and Figs. 48 and 49, element S354	If the user chooses to continue, the printing result will be different than what he originally intended based on his driver setting.
<i>Claim 2:</i> ...determining which print driver settings are selected comprises determining a print driver setting that has been selected by the user.	Fig. 51-53 are the types of printer heads selected by the user which is used in Fig. 49, element S353 for comparison	
<i>Claim 3:</i> ...determining a current a current default print setting	Fig. 39 and 47 show a default button can be selected by the user. The color setting selected by the user will be used in Fig. 49, element S353 for comparison	
<i>Claims 5, 11, 15, 19 and 24:</i> ...providing notification comprises facilitating a warning dialogue box to the user	Figs. 41 and 48	
<i>Claim 6-8, 12, 16, 20-22, 25-27:</i> ...providing an indication of degree of severity ...suggesting an alternative print driver setting ...automatically adjusting a print driver setting	Fig. 41 and 48, indicates to the user that a specific setting will not match, thus indicating the degree of severity and lets the user and lets the user decide whether to continue or stop based on his/her own judgment. By pressing Continue or OK, the user does not need to rectify the setting and the system will automatically go to the current physical setting, e.g.,	

	monochrome printing.	
<i>Claim 17:</i> ...logic configured to cancel printing	Fig. 41 and 48, Stop button cancels printing.	

(10) Response to Argument

Issue 1

1. Appellant argues the lack of a prima facie case for obviousness in the final action mailed 03/21/2005.

Examiners Response to Issue 1

2. The examiner made a minor typo on the final office action mailed on 03/21/2005, where the heading for the rejection should have been tailored for a 35 USC 102(e) rejection instead of a 35 USC 103(a) rejection. It should have been the same as in the non-final office action mailed 11/16/2004, since the same 35 USC 102(e) rejection is essentially made. One can see that all the limitations of the claims by the appellant are stated in the rejection in the final office action, thus it is evident that Moro is anticipatory of the instant application. Appellant's arguments regarding missing prima facie case for obviousness are therefore moot.

Issue 2: Claims 1-3,5-9,11-13, 15-17 and 18-27

3. Appellant argues Moro does not teach determining and warning whether print driver settings are likely to adversely affect the quality of what is printed, the speed of printing, *or* the amount of print device consumables.

Examiners Response to Issue 2

4. The Examiner must first emphasize that the claims limitations in the independent claims regarding the *three criteria* of quality, speed and consumption of print device consumables are

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stated in *alternative* form. Thus, the *Examiner only needs to fulfill one of the three* criteria for a proper rejection. The *central issue of contention* in the appellant's arguments is the *relative terminology "quality of images printed on the print media"*. Appellant asserts that Moro's different type of color settings and the paper size does not effect the quality of what is printed. The examiner does not agree based what of one of ordinary skill in the art would interpret "print quality" to mean *as well* the broadest reasonable interpretation of the claim language in light of the specification, without reading limitations from the specification into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26-USPQ2d 1057 (Fed. Cir. 1993).

The prior art reference to Moro clearly uses different and separate printer heads/cartridges for monochrome, color AND *photo color printings* (Fig. 51-53 show the three different printer settings *Photo Color, Color and Monochrome, each requiring a different type of printer head*; Fig. 54 elements S404, S405, S406 shows the comparison of driver settings to see if it conforms with one of the three different type of printer heads). For example, the *quality of a printed flower is much better with color photograph print than the black and white image print*. To further show how one of ordinary skill in the art would agree that photo color prints are of higher "quality", Examiner uses, as extrinsic evidence, US Pat. No. 6,644,800 to Anderson. Anderson confirms in Column 1, lines 42-52 as follows:

One particular printing application which has recently received much attention by inkjet printer manufactures is the printing of high quality images, such as photo images. In order to attain enhanced print quality and image quality as in a photograph, a variety of special print media have been developed to work with aqueous inks. However, such media is often cost prohibitive and is limited in its realistic use. Alternatively, images have been created using ink drops of relatively small volume in an effort to increase sharpness and achieve a photo print quality level of detail.

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Anderson explicitly discloses the sentiments of what *one of ordinary skill in art would attribute to photo color prints*, a print that is of a *higher grade of quality*.

To reiterate Examiner's arguments from the Final Action mailed on 03/21/2005, a general interpretation of *print quality* is simply *viewed as the "degree of excellence"* of what is printed on the print media as per Merriam-Webster Online Dictionary's definition of "quality". Details of an image, e.g., *a printed color photograph* (note the keyword here is *photograph*) of a flower, is *clearly better quality than a printed black and white or color non-photographic image* (note the keyword here is *non-photograph*) of the same flower. *Much more detail* can be derived from the *printed color photograph* of the flower such that it depicts more accurately how the flower looks in real life to the naked eye compared to a printed black and white image or a non-photographic color image.

It appears in the appellant arguments that the appellant desires to refer to quality of image to mean the resolution of the printed image, however, the *claims are completely silent and void of any reference to the resolution* leaving the interpretation up to the Examiner. Indeed, even in the specification itself, there only appears to be two references to "resolution" (pgs. 1 and 12) and both of them are not stated in exacting language, but rather used as loose examples. Furthermore, the *specification uses very open-ended language regarding print quality*. Page 10, lines 15-17 of the specification are shown below, showing the open-ended language of regarding print quality.

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Although various print factors have been explicitly cited, persons having ordinary skill in the art will appreciate that various other factors that the user can control can adversely affect print quality.

Furthermore, *Appellant states that print settings may adversely affect print quality*, page 10, lines 8-12 shown below.

As will be appreciated by persons having ordinary skill in the art, many different print settings may result in adverse printing results of one sort or another. For instance, several of the print setting selections (i.e., print factors) may adversely affect the print quality of the hard copy document that is generated by the printing device 104.

Clearly the color setting on a printer, just like the *color settings of Moro* allowing the user to select (Fig. 51-53 of Moro) *are by definition print settings*.

Another example that the appellant intends to leave “quality of image” to be as broad as possible is on pg. 10, lines 10-15 of the specification. The appellant cites factors causing adverse print quality to be use of recycled media, use of relatively thick media, use of rough-textured media, use of an economy mode and so forth. *None of these involve resolution* and if one were to consider these factors affecting print quality, then *color vs. monochrome and type of paper/paper size MUST be considered as affecting quality*. Both affect the visual characteristics of the printed material to the eyes of the user in a similar way as the factors recited by the appellant, e.g., both affects the discernability of the printed image.

Below, the Examiner gives a mapping of his response to each of appellant’s arguments in the Appeal Brief of the specified claims.

5. Appellant argues in section A of the appeal brief that Moro does not teach a system in which a printer driver setting is checked to determine whether the setting would adversely affect one of the three criterion of print quality, print speed or consumption of printing device consumables and cites various parts of the Moro.

Appellant admits and agrees with the Examiner with respect to *Moro being able to compare a current state of the printer with the driver settings* (Appeal Brief, page 7, first three lines in section A). Examiner contends that the *comparison* of the current state of the printer (e.g., which type of printer head is in the printer or the paper size the printer currently handles) is *equivalent* to the *checking* to determine whether the setting would adversely affect the three criteria the appellant is claiming. Examiner points out that the comparison between current state of the printer and the driver settings are shown in Fig. 54, elements S404, Fig. 49, element S353 and Fig. 42, element S283. In this comparison, *Moro intrinsically determines if there will be an adverse affect on the printing based on the current settings*. This is illustrated in Fig. 54, 49 and 42, where there is a conditional branch logic in elements S404, S353 and S283. Clearly, if the comparison yields that the driver settings and the current state of the printer do not conflict, then it will execute the “SAME”/“NO” branch and proceed with the printing. However, if there is a difference, e.g., something that can adversely affect the print quality such as the color instead of photo-color, the logic will flow to the “DIFFERENT”/“YES” branch and provide a visual indication to the user (Fig. 48 and 41 respectively) that is a warning to the user (notice the triangle and exclamation mark in the visual indicator of Fig. 48 and 41). *It should be noted again, that the independent claim recite the three criterion of quality, speed and consumption of print device consumables in the alternative only. Examiner is only required to satisfy one of the criteria* in order to anticipate the limitation.

6. Per section B, subsection (a) regarding print quality, appellant argues that incorrect paper size and a different print head (note print head dictates whether the printer will print in color or monochrome; Fig. 48 shows the condition where the color print head is not installed and thus

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gives the user ability to print using the monochrome print head) does not affect print quality and alleges the Examiner has not explained how the paper size or print head color mismatch adversely affect the quality of the images on the print media.

Along the same vein as Examiner's statements on pages 2 and 3 of the final office action, first, *photo color, color and monochrome settings clearly effects the quality of the image* simply based on the *ability to discern more information*, for instance between a *photo-color* image vs. a *color* or *monochrome* one. Page 10, lines 5-20 of the appellant's specification seems to concede this point since it states using economy mode would effect the quality of the image. One of ordinary skill in art will know that economy mode in essence reduces the amount of special ink and level of contrast to reduce ink consumption. Thus, what appears to the user will be less discernable, just like if one were to use monochrome instead of color. Per the paper size, one of ordinary skill in the art would be aware that *if a paper size used that is not in accordance with the current driver setting state, framing, formatting, bordering of the final printed item will be adversely affected*. In fact, if some of the features of the original image may be cropped and would simply be left off of the printed media. This would constitute as an adverse print quality.

7. Per section B, subsection (b), appellant argues Examiner does not explain how print size and print head color mismatch affects the speed at which printing is performed. First, Examiner believes he has shown how the print quality is adversely effected by a *mismatch in printer and driver settings and that suffices to read on the limitations involving quality, print speed and ink consumption since they are stated in the alternative*. Examiner does which to address the speed issue though, particularly when printing in color versus monochrome mode. It is well

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known to one of ordinary skill in the art that color printing is intrinsically slower than b/w printing. *Color printing generally requires mixing three different color compartments,* requiring additional overhead time, and thus *much slower, compared to* printing in *monochrome* which uses only one ink compartment since there is only one ink color and thus is significantly faster due to the lack of overhead required for mixing different colors, processing, etc.

8. Per section B, subsection (c), *the Examiner has addressed two of the three criteria, more than enough to meet the respective limitation, which is stated in the alternative.*

Specifically regarding consuming a large amount of ink, Examiner points out that a wrong print head, e.g., *monochrome instead of color, would deplete the monochrome print cartridge faster* than if the color print cartridge were installed. The printing would necessarily require shading and other compensation effects in order to print something equivalent to a color image. Note also, *there is no clearly definition of what constitutes a "large" amount of printing device consumables,* and Examiner interpreting this simply to mean an amount more than average.

9. Per section B, subsection (e), appellant argues *claims 6 requires both a degree of severity indication AND an indication of mismatch.* Examiner points to Fig. 41 and 48. The *message itself is a warning of the mismatch*, e.g., the indication of the mismatch, and *the selectable buttons indicate the degree of severity*, e.g., the "continue" and "stop" button. If the continue button is selected, clearly the user feels the error is not significant, e.g., a low to nil degree of severity and thus continue printing. On the other hand, the stop button is pressed if the user feels the degree of severity is significant and thus the printing will not continue. Both distinct indications are therefore shown by Moro.

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Issue 3

10. Applicant argues the non-entry of Claims 28-33 as improper because they contain subject matter that has already examined and thus should be entered.

Examiners Response to Issue 3

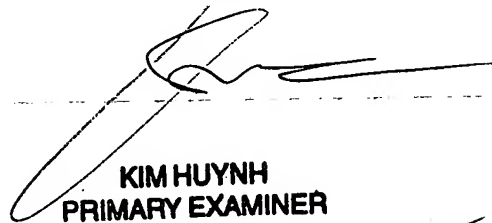
11. First, the question of whether it is or is not proper for the examiner to enter claims after final is not subject to appeal but instead subject to petition. Second, The appellant attempts to parse each of these three criteria into separate independent claims by adding new claims 28-33, submitted *after final* on 05/09/2005. This clearly changes the metes and bounds of what is claimed and would require a further consideration by the Examiner. For these reasons, claims 28-33 are not entered.

12. For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Examiner Alan Chen
October 8, 2005

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